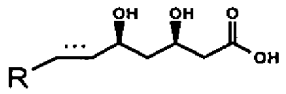
Claim 1 (currently amended) A process for the manufacture of an enantiomerically pure form or a racemic form of a compound of formula



(I)

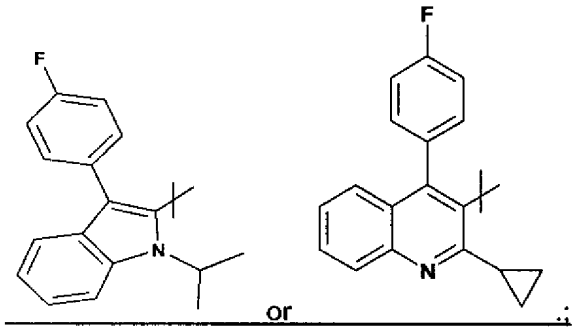
or a salt, especially a pharmaceutically acceptable salt with a base, thereof or a lactone thereof

wherein the element ..... ~~represents $-CH_2-CH_2-$ or $-CH=CH-$ and~~

~~R represents a cyclic residue~~

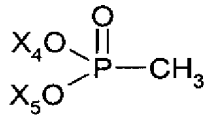
represents –CH=CH- and

R represents the cyclic residue of formula

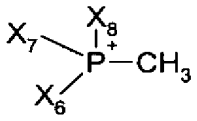


or .; comprising

(a) reacting compounds (IIIa) or (IIIb)



(III a) or

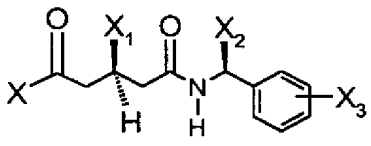


Hal$^-$ (III b),

wherein X_4 and X_5, independently of one another, represents C_1-C_7-alkyl or phenyl-C_1-C_7-alkyl;

X_6, X_7 and X_8, independently of one another, represent phenyl that is unsubstituted or substituted by one or more substituents selected from the group consisting of C_1-C_7alkyl, hydroxy, C_1-C_7alkoxy, C_2-C_8alkanoyl-oxy, halogen, nitro, cyano, and CF_3; and Hal$^-$ represents a halide anion;

with a metallated alkane to form the corresponding ylide and then reacting the resulting ylide intermediate with a compound of formula



(III c),

wherein

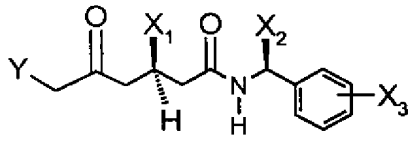
X represents etherified hydroxy, esterified hydroxy, or unsubstituted or mono- or di-substituted amino;

X_1 is protected hydroxy;

X_2 represents C_1-C_7alkyl; and

X_3 represents hydrogen or one or more substituents, e.g. selected from the group consisting of C_1-C_7alkyl, hydroxy, C_1-C_7alkoxy, C_2-C_8alkanoyl-oxy, halogen, nitro, cyano, and CF_3;

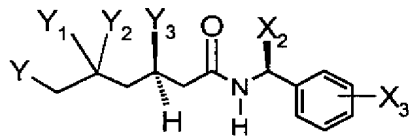
(b) optionally, if desired, converting a resulting compound of formula (III d)



(III d),

wherein X_1, X_2 and X_3 have the meanings as defined above and Y represents a group of formula $(X_4O)(X_5O)P(=O)$- or $(X_6)(X_7)(X_8)P^+$ Hal^- and X_4, X_5, X_6, X_7, X_8 and Hal^- have the meanings as defined above;

into a compound of formula (III e)



(III e),

wherein X_2, X_3 and Y, have the meaning as defined above and wherein

Y_1 represents hydroxy or protected hydroxy and Y_2 is hydrogen and Y_3 is hydroxy or protected hydroxy, and Y_1 and Y_3 forming a syn-diol configuration; or wherein

Y_1 and Y_3 together represent –O-Alk-O- and Alk being C_1-C_7alkylidene; and Y_2 is hydrogen, and Y_1 and Y_3 forming a syn-diol configuration;

(c) reacting a compound of formula (III e)

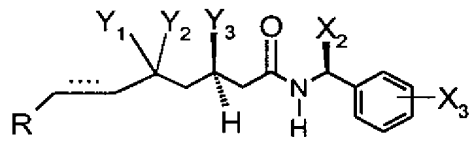
wherein X_2, X_3 and Y, have the meaning as defined above and wherein

Y_1 represents hydroxy or protected hydroxy and Y_2 is hydrogen and Y_3 is hydroxy or protected hydroxy, and Y_1 and Y_3 forming a syn-diol configuration; or wherein

Y_1 and Y_3 together represent –O-Alk-O- and Alk being C_1-C_7alkylidene; and Y_2 is hydrogen, and Y_1 and Y_3 forming a syn-diol configuration; or wherein

Y_1 and Y_2 together represent the oxo group and Y_3 represents protected hydroxyl (corresponding to compounds of formula (II d);

with an aldehyde of formula (III f) R-CH(=O) resulting in a compound of formula (III g)



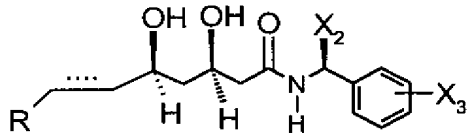
(III g);

wherein R, X_2, X_3, Y_1, Y_2 and Y_3 and the element ⋯⋯ have the meanings as defined above;

if desired, reducing corresponding compounds of formula (III g), wherein the element ⋯⋯ is –CH=CH- to result in a compound wherein said element is $-CH_2-CH_2-$;
and

(d) if a compound of formula (III g) is obtained, wherein one of Y_1 and Y_3 is protected hydroxy and the other is hydroxy or both of Y_1 and Y_3 is protected hydroxy and, in each case Y_2 is hydrogen; and Y_1 and Y_3 are forming the syn configuration; or

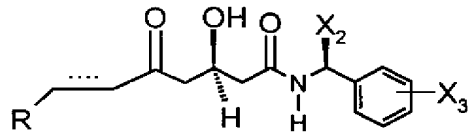
Y_1 and Y_3 together represent –O-Alk-O- and Alk being C_1-C_7alkylidene and Y_1 and Y_3 are forming the syn configuration; and Y_2 is hydrogen; or
by removing the hydroxy protection group(s) to a compound of formula



(III h); or

if desired, reducing corresponding compounds of formula (III h), wherein the element ⋯⋯ is –CH=CH- to result in a compound wherein said element is $-CH_2-CH_2-$;

(e) if a compound of formula (III g) is obtained, wherein Y_1 and Y_2 together form the oxo group =O; and Y_3 is protected hydroxy (X_1); converting said compound of formula (III g), to a compound of formula (III i)



(III i)

by removing the hydroxy protection group;

wherein R, X_2, X_3 and the element ⋯⋯ have the meanings as defined above ; and subsequent reduction of said compound of formula (III i) to a compound of formula (III h);

(f) hydrolyzing a compound of formula (III h) to a compound of formula (I) or a salt thereof and

(g) isolating a resulting compound of formula (I) or a salt thereof;
and, if desired, converting a resulting free acid of formula (I) into a salt thereof or into a lactone of formula (I a) or (I b), respectively, or converting a resulting lactone of a formula (I a) or (I b) into an acid of formula (I) or a salt thereof.

Claim 2 (cancelled)

Claim 3 (previously presented) A process according to claim 1, wherein a compound selected from the group consisting of a compound of formulae (III c), (III d), (III e), (III g), (III h), and (III i) is used, wherein, in each case, X_2 is methyl and X_3 is hydrogen.

Claim 4 (previously presented) A process according to claim 1, wherein a compound of formula (III c) is used, wherein X is N-C_1-C_7alkyl-N-C_1-C_7alkoxy-amino.

Claim 5 (previously presented) A process according to claim 1, wherein a compound selected from the group consisting of a compound of formulae (III c) and (III d) is used, wherein X_1 is tert-butyl-dimethyl-silyloxy, and from the group consisting of a compound of formulae (III e), (III g) and (III h), is used, wherein Y_3 is tert-butyl-dimethyl-silyloxy.

Claims 6 through 8 (cancelled)